

Notes on the Bembidiinae (Carabidae) of Japan

XII. A New Species of the Subgenus *Plataphus*

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Abstract A new bembidiine species belonging to the subgenus *Plataphus* is described from the Island of Yaku-shima, Southwest Japan, under the name of *Bembidion (Plataphus) watanabei*. It is related to *B. (P.) ohtsukai* (MORITA), but differs from it mainly in the shape of body and male genitalia.

What will be dealt with in this part is the result of my study on a species of the subgenus *Plataphus*, obtained on the mountainous island, Yaku-shima, in Southwest Japan. The specimens were submitted to me for my study through the courtesy of Mr. Hideyuki WATANABE, a friend of mine.

In 1996, I described five species of the subgenus from Japan and placed them in the genus *Ocydromus*. Though my own view concerning the genus has been changed to some extent, this work is strictly limited without analyzing or taking any action about this problem.

The abbreviations used herein are as follows: L – body length, measured from apex of clypeus to apices of elytra; HW – greatest width of head; PW – greatest width of pronotum; PL length of pronotum; PA – width of pronotal apex; PB – width of pronotal base; EL – greatest length of elytra; EW – greatest width of elytra; FL – length of metafemur; ML – length of metatrochanter; TL – length of hind tarsus; TI – length of segment 1 of hind tarsus; TV – length of claw segment of hind tarsus; M – arithmetic mean; NSMT – National Science Museum (Nat. Hist.), Tokyo.

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Bembidion (Plataphus) watanabei MORITA, sp. nov.

[Japanese name: Yaku-aomarugata-mizugiwa-gomimushi]

(Figs. 1–5)

Diagnosis. Body relatively small; colour black with bluish lustre; tarsi brown and partially dark brown; eyes rather small; sides of pronotum hardly sinuate before hind angles; elytra narrow; in ♂, anal sternite usually with two pair of setae; aedeagus

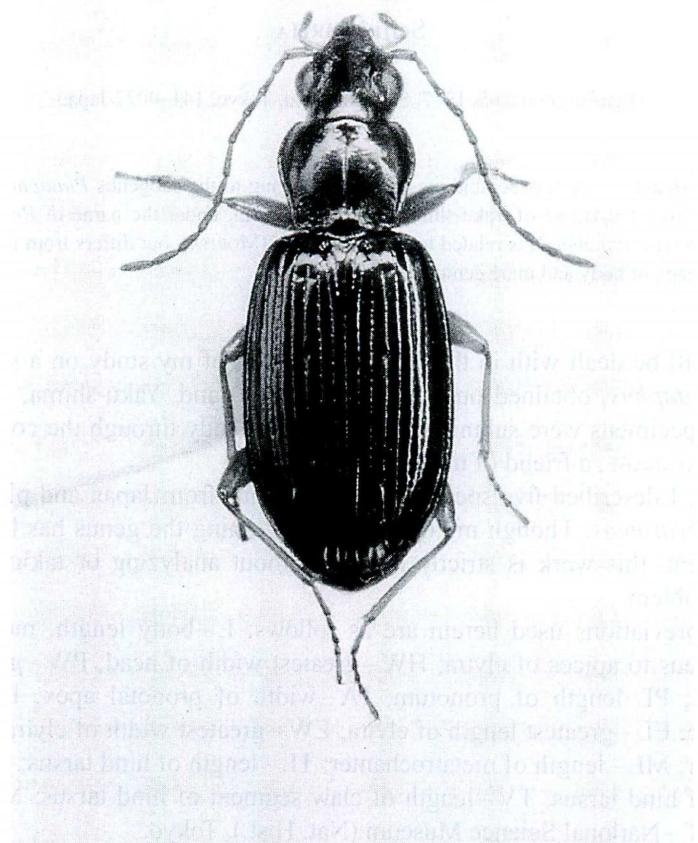


Fig. 1. *Bembidion (Plataphus) watanabei* MORITA, sp. nov., from Mt. Nonki-dake.

weakly arcuate, and with a very shallow constriction just behind ostium flag in lateral view.

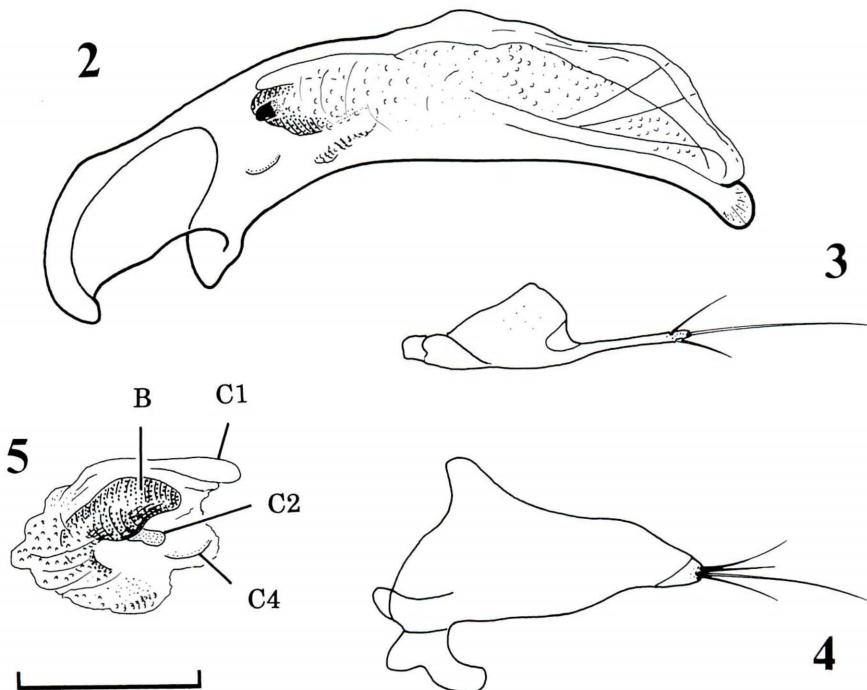
Description. L: 3.42–4.29 mm. Body relatively small and with rather narrow elytra. Body black with bluish lustre; ventral side blackish brown to black; legs brown, but the tarsi are usually and partially dark brown; mandibles, palpi, labrum and antennae slightly darker than legs.

Head moderately convex with rather small eyes; PW/HW 1.24–1.30 (M 1.27) in 10♂♂, 1.19–1.32 (M 1.26) in 10♀♀; frontal furrows wide and straight, slightly diver-

gent posteriad, and reaching the post-eye level; anterior supraorbital pore situated at the mid-eye level, posterior ones at the post-eye level; microsculpture clearly impressed and composed of isodiametric to wide meshes; relative lengths of antennal segments as follows:—I:II:III:IV:V:VI:XII=1:0.77:1.06:1.07:1.12:1.12:1.29 in 10♂♂, 1:0.76:1.01:1.05:1.05:1.09:1.22 in 10♀♀.

Pronotum transverse; PW/PL 1.28–1.35 (M 1.31) in 10♂♂, 1.26–1.34 (M 1.30) in 10♀♀; sides moderately arcuate and weakly sinuate before hind angles or divergent towards hind angles; PW/PA 1.41–1.49 (M 1.44) in 10♂♂, 1.37–1.43 (M 1.40) in 10♀♀; PW/PB 1.25–1.33 (M 1.30) in 10♂♂, 1.28–1.34 (M 1.31) in 10♀♀; PA/PB 0.84–0.92 (M 0.90) in 10♂♂, 0.91–0.95 (M 0.93) in 10♀♀; median line deep, rather depressed at the sides; hind angles obtuse and rounded at the tips, and with weak carinae on each side; base produced backwards and straight at the sides; microsculpture composed of wide or transverse meshes.

Elytra rather elongate; EW/PW 1.38–1.50 (M 1.46) in 10♂♂, 1.44–1.57 (M 1.50) in 10♀♀; EL/EW 1.51–1.64 (M 1.54) in 10♂♂, 1.44–1.60 (M 1.52) in 10♀♀; shoulders moderately rounded; sides weakly arcuate from shoulders to the widest part,



Figs. 2–5. Male genital organ of *Bembidion (Plataphus) watanabei* MORITA, sp. nov.; 2, aedeagus, left lateral view; 3, right style, left lateral view; 4, left style, left lateral view; 5, extracted inner sac, showing components, right lateral view; C1, dorso-proximal plate; C2, copulatory piece; C4, copulatory piece; B, bundle of fibres. (Scale: 0.2 mm.)

rarely parallel at the widest part, and then rather moderately arcuate to apices; apex of each elytron rounded, forming a small re-entrant angle at suture; intervals weakly convex; striae almost entire, weakly and sparsely crenulate, and becoming shallower towards apices; apical striole joining stria 5; interval outside stria 5 strongly convex; two dorsal pores situated at 1/3–2/5, and 13/20–4/5 from base, respectively; microsculpture composed of fine transverse meshes.

In ♂, anal sternite usually with two pair of setae and with a shallow emargination at a little outside of outer setae on each side; legs of moderate size; ML/FL 0.40–0.45 (M 0.43) in 10♂♂, 0.40–0.45 (M 0.43) in 10♀♀; TI/TV 1.08–1.30 (M 1.15) in 10♂♂, 1.00–1.25 (M 1.04) in 10♀♀; TL/HW 0.88–0.95 (M 0.91) in 10♂♂, 0.82–0.97 (M 0.88) in 10♀♀.

Aedeagus elongate, about 1/3 as long as elytra and weakly arcuate in lateral view; apical part with a very shallow constriction in lateral view; apical lobe inclined to the right in dorsal view; apex rather wide and rounded at the tip in lateral view. Inner sac armed with five components: dorso-proximal plate (C1), bundle of fibres (B), a teeth-patch (T) (cf. MORITA, 1996, fig. 7), and two copulatory pieces (C2, C4); ostium flag narrow and moderately arcuate in lateral view. Left style with one long seta and two or three short setae at apex, right one with one or two long seta(e) at apex, and one or two short seta(e) at apical part.

Variation of anal sternite. Of seventeen males, eleven specimens have two pair of setae. In three males, a pair of inner setae are lacking. In one specimen, the outer seta on the left is lacking. In the remaining two specimens, the inner seta on the right side is lacking.

In females, all the specimens have two pair of setae.

Type series. Holotype: ♂, allotype: ♀, 16–VIII–2002, H. WATANABE leg. (NSMT). Paratypes: 1♂, 5♀♀, 11–15–VIII–2001, H. WATANABE leg.; 15♂♂, 17♀♀, 16–VIII–2002, H. WATANABE leg.

Type locality. Mt. Nonki-dake, at the southern part of the Island of Yaku-shima, off southern Kyusyu, Southwest Japan.

Notes. Of the eleven species previously described in the subgenus *Plataphus* from Japan, five seem to form a single group, herewith called the *shilenkovi* group. They are *B. gebleri edai* FASSATI (1954, p. 83), *B. shilenkovi* MORITA (1989, p. 28), *B. yoshikawai* (MORITA) (1996, p. 255), *B. shikokuense* (MORITA) (1996, p. 259), and *B. ohtsukai* (MORITA) (1996, p. 260). The present species is a sixth member of the group, and is closest to the last species in having a similar body lustre and wide aedeagal apex. However, this new species is distinguished from *B. (P.) ohtsukai* by the following points: 1) pronotum and elytra narrower, 2) tarsi partially dark brown, 3) eyes rather small, 4) sides of pronotum hardly sinuate before hind angles, and 5) aedeagus weakly arcuate.

要 約

森田誠司：日本産ミズギワゴミムシ類の知見。XII. 屋久島産ヒラタミズギワゴミムシ亜属の1新種。——屋久島から発見されたヒラタミズギワゴミムシ亜属*Plataphus*の1新種を記載した。この亜属の種は、わが国から11種知られるが、この種は陰茎の内部構造から判断して*B. (P.) shilenkovi*種群に所属する。種名は本種を発見し、再度屋久島をおとずれ、この研究のために追加個体を採集してくださった渡辺秀行氏に献名した。

References

MORITA, S., 1989. *Bembidion gebleri* GEBLER (Coleoptera, Carabidae) and its new relative. *Elytra, Tokyo*, **17**: 19–34.
 ———— 1996. Notes on the Bembidiinae (Carabidae) of Japan. IX. Five new species of the subgenus *Plataphus*. *Jpn. J. Ent.*, **64**: 255–266.

Elytra, Tokyo, **31** (1): 219–220, June 30, 2003

New Records of *Apriona* Species (Coleoptera, Cerambycidae, Lamiinae)

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Apriona vagemaculata BREUNING

Apriona vagemaculata BREUNING, 1948, Bull. Mus. Hist. nat. Belg., **24**(38), p. 17. —— GILMOUR, 1958, Idea, **11**, p. 97. —— BREUNING, 1962, Cat. des Lamiaires du Monde, **6**, p. 387.

This species was originally described from Sumatra. Two females from West Malaysia are preserved in my collection.

Specimens examined. 2♀♀, Cameron Highlands, West Malaysia, V–1993.

Apriona irma KRIESCHE

Apriona irma KRIESCHE, 1920, Archiv. Naturg., **85A**(5), p. 194. —— GILMOUR, 1958, Idea, **11**, p. 101. —— BREUNING, 1962, Cat. des Lamiaires du Monde, **6**, p. 388.

This species has so far been known from Mt. Singalang, West Sumatra and Siberut Island. This time, the following materials from West Malaysia are confirmed.

Specimens examined. 2♂♂, 1♀, Cameron Highlands, West Malaysia, III~V–1993, in my